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EXAMINER	
PARRY, CHRISTOPHER L	
ART UNIT	**PAPER NUMBER**
2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/733,185	BHATT, BHAVESH B.	
	Examiner	Art Unit	
	Chris Parry	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *47 and 49-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *47 and 49-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 December 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "160" has been used to designate both data decoder and graphics processor shown in figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "180" has been used to designate both 32 bit system bus and modem shown in figure 1. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 100 in figure 1; 200 in figure 2; and 310 in figure 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because reference character 443 has been used to reference 5 most viewed channels in figure 4 where the specification uses reference character 442 to reference 5 most viewed channels in figure 4. Corrected drawing

sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

5. Applicant's arguments with respect to claims 47 and 49-51 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument (page 5, 2nd ¶, lines 5-11) starting the previous office incorrectly asserts the teaching of deleting the first portion of the EPG from the RAM after the first portion of the EPG is copied from the RAM to the hard disk

is not taught by the combination of Tsukidate and Williams, the examiner respectfully disagrees.

Tsukidate discloses data processing control unit 55 moves program information from internal memory to disk unit 51. Tsukidate further discloses updating program basic information 22 stored in internal memory 55 (Col. 13, lines 41-56). Although it is not explicitly stated, it is known in the art that when data is updated, data that is not frequently accessed is typically stored in a slower, more permanent medium such as a disk and then the previous version is subsequently deleted from the RAM so as to free up system resources by not unnecessarily storing data in two locations within the system.

Furthermore, Williams teaches RAM provides only temporary storage of data when executed by the processor, while the hard disk provides long-term storage (Col. 14, line 45-50). Thus the combination of the two references meets the limitation of deleting the first portion of the EPG from the RAM after the first portion of the EPG is copied from the RAM to the hard disk by disclosing that it is known in the art to keep data that is not frequently accessed and for long term storage in a hard disk while keeping data that is frequently accessed in a faster storage medium such as RAM.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 47 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsukidate et al. "Tsukidate" (USPN 6,507,950) in view of Williams et al. "Williams" (USPN 5,977,964).

Regarding Claim 47, Tsukidate discloses a method comprising:

a set-top receiver (31 – figure 5) receiving first data (collection keys 26, set by the user; Col. 10, lines 9-13), wherein the data identifies a television channel (i.e., identifies recommended programs that have assigned television channel numbers) (Col. 13, lines 18-40 and 51-60);

the set-top receiver receiving an electronic program guide (EPG) (i.e., program information) (Col. 9, line 65 to Col. 10, line 3);

the set-top receiver storing the EPG to a hard disk (51 – figure 10) of the set-top receiver (Col. 12, lines 60-65);

the set-top receiver comparing the first data with data of the EPG ("match" operation, Col. 12, lines 56-59; discussed at Col. 8, line 44 to Col. 9, line 31);

storing (i.e., moving) a first portion of the EPG from the hard disk to a random access memory (RAM) (internal memory of processor 55, Col. 12, lines 23-26) of the set-top receiver in response to the set-top receiver identifying a match between the first data and data of the EPG (Col. 12, line 65 - Col. 13, line 14);

copying the first portion of the EPG from the RAM to the hard disk (Col. 13, lines 41-44); and

deleting the first portion of the EPG from the RAM (updating contents of RAM and by updating, old basic program information data is inherently removed in order to make room for updated data in memory and would not be unnecessarily stored in two locations; see Col. 13, lines 44-51) after the first portion of the EPG is copied from the RAM to the hard disk (unit 55 stores received program information or "first portion" to disk unit 51) (Col. 13, lines 41-56).

Tsukidate further teaches moving portions of the EPG matching a "recommended programs" attribute (Col. 10, lines 8-13) and using the RAM (55 - figure 10) to cache the portions of the EPG retrieved and extracted from the hard disk (51 - figure 10) by operation of the processor (Col. 13, lines 9-17). Tsukidate further discloses utilizing internal memory or RAM as cache memory to store basic program information or first potion of the EPG so it can be read from internal memory 55 and displayed instantaneously (Col. 14, lines 25-35). Tsukidate additionally discloses updating the program information stored in internal memory 55 and storing data back to disk unit 51. By moving program data to disk unit 51, as is known in the art, receiver 31 is free to delete data that was previously stored in memory 55 in order to allow storage of updated data.

However, Tsukidate fails to explicitly disclose receiving second and third data to the EPG, wherein the second and third data identify a channel and a time slot, respectively; comparing the second and third data to the EPG; and storing second and third portions of the EPG in the hard disk when these portions match the received second and third data.

In an analogous art, Williams discloses a method comprising:

a set-top receiver (600 – figure 6; [system controller 600 has same functionality as system controller 104; Col. 14, lines 3-7]) receiving first data, wherein the first data identifies a television channel (monitor user habits and store most frequently watched channels in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver receiving second data, wherein the second data identifies a television program that can be presented on a television (monitor user habits and store top ten favorite programs in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver receiving third data, wherein the third data identifies a time slot (monitor user habits and store typical watching times in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver comparing the first data with data of the EPG (program information) (Col. 8, lines 41-46);

the set-top receiver comparing the second data with data of the EPG (program information) (Col. 8, lines 41-46);

the set-top receiver comparing the third data with data of the EPG (program information) (Col. 8, lines 41-46);

storing a first portion of the EPG from the hard disk (620 – figure 6) to a RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver identifying a match between the first data and data of the EPG (Col. 7, line 37 to Col. 8, line 3);

storing a second portion of the EPG from the hard disk (620 – figure 6) to a RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver identifying a match between the second data and data of the EPG (Col. 7, line 37 to Col. 8, line 3);

storing a third portion of the EPG from the hard disk (620 – figure 6) to a RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver identifying a match between the third data and data of the EPG (Col. 7, line 37 to Col. 8, line 3) and;

deleting the first portion of the EPG from the RAM after the first portion of the EPG is copied from the RAM to the hard disk (Col. 14, lines 45-50).

Williams teaches that customized program guide enhances to the user's enjoyment of the system (Col. 3, lines 20-27), and that the RAM provides only temporary storage of data when executed by the processor, while the hard disk provides long-term storage (Col. 14, lines 45-50). Williams further teaches a customized EPG can be displayed based on any of the user preferences, such as most watched channels, top ten favorite programs and even typical watching periods and system controller scans program information for matches to the user's preferences (Col. 6, line 65 to Col. 7, line 2 and Col. 8, lines 14-48).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsukidate to include receiving first data identifying a television channel, second data identifying a television program, and third data identifying a time slot; comparing the first, second, and third data to data of the EPG; storing first, second, and third portions of the EPG to RAM in response to identifying a match between the first, second, and third data and data of first, second,

and third portions of the EPG, as taught by Williams, thereby enhancing the user's enjoyment of the system.

Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Tsukidate to include copying the cached portions of the EPG and deleting the first portion of the EPG from the RAM after the first portion of the EPG is copied from the RAM to the hard disk, as taught by Williams, to create more space in the cache memory to allow for newly updated information that is frequently accessed to be stored and copying old data for the purpose of permanently storing the data on a reliable medium as well as deleting the old data from cache so as not to unnecessarily waste system resources by storing data on two storage mediums.

Regarding Claim 49, Tsukidate discloses a method comprising:

a set-top receiver (31 – figure 5) receiving first set of data (collection keys 26, set by the user; Col. 10, lines 9-13), wherein each data of the first set identifies a respective television channel (i.e., identifies recommended programs that have assigned television channel numbers) (Col. 13, lines 18-40 and 51-60);

the set-top receiver receiving an electronic program guide (EPG) (i.e., program information) (Col. 9, line 65 to Col. 10, line 3);

the set-top receiver storing the EPG to a hard disk (51 – figure 10) of the set-top receiver (Col. 12, lines 60-65);

the set-top receiver comparing each data of the first set with data of the EPG ("match" operation, Col. 12, lines 56-59; discussed at Col. 8, line 44 to Col. 9, line 31);

storing (i.e., moving) a first portion of the EPG from the hard disk to a random access memory (RAM) (internal memory of processor 55, Col. 12, lines 23-26) of the set-top receiver in response to the set-top receiver comparing each data of the first set with data of the EPG (Col. 12, line 65 - Col. 13, line 14);

accessing one or more of the first portions of the EPG (i.e., recommend programs) stored in the RAM (Col. 12, line 56 to Col. 13, line 56);

the set-top receiver detecting one or more of the first portions of the EPG stored in the RAM, which is less frequently accessed than the other first portions of the EPG stored in the RAM (i.e., retrieving portions of EPG for storage in RAM based on frequency of utilization, Col. 13, lines 10-35); and

moving the detected one of the first portions of the EPG stored in the hard disk (Col. 13, lines 41-56).

Tsukidate further teaches moving portions of the EPG matching a "recommended programs" attribute (Col. 10, lines 8-13) and using the RAM (55 - figure 10) to cache the portions of the EPG retrieved and extracted from the hard disk (51 - figure 10) by operation of the processor (Col. 13, lines 9-17). Tsukidate further discloses utilizing internal memory or RAM as cache memory to store basic program information or first potion of the EPG so it can be read from internal memory 55 and displayed instantaneously (Col. 14, lines 25-35). Tsukidate additionally discloses updating the program information stored in internal memory 55 and storing data back to disk unit 51. By moving program data to disk unit 51, as is known in the art, receiver 31 is free to delete data that was previously stored in memory 55 in order to allow storage of

updated data. However, Tsukidate fails to explicitly disclose storing a plurality of first portions of the EPG from the hard disk to a RAM of the set-top receiver in response to the set-top receiver comparing each data of the first set with data of the EPG.

In an analogous art, Williams discloses a method comprising;

a set-top receiver (600 – figure 6; [system controller 600 has same functionality as system controller 104; Col. 14, lines 3-7]) receiving a first set of data (user preferences), wherein each data of the first set identifies a television channel (monitor user habits and store most frequently watched channels in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver comparing each data of the first set with data of the EPG (program information) (Col. 8, lines 41-46);

storing a plurality of first portions of the EPG from the hard disk (620 – figure 6) to a RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver comparing each data of the first set with data of the EPG (Col. 7, line 37 to Col. 8, line 3);

moving the detected one of the first portions of the EPG stored in the RAM to the hard disk (Col. 14, lines 45-50).

Williams teaches that customized program guide enhances to the user's enjoyment of the system (Col. 3, lines 20-27), and that the RAM provides only temporary storage of data when executed by the processor, while the hard disk provides long-term storage (Col. 14, lines 45-50). Williams further teaches a customized EPG can be displayed based on any of the user preferences, such as most watched

channels, top ten favorite programs and even typical watching periods and system controller scans program information for matches to the user's preferences (Col. 6, line 65 to Col. 7, line 2 and Col. 8, lines 14-48).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Tsukidate to include storing a plurality of first portions of the EPG from the hard disk to a RAM of the set-top receiver in response to the set-top receiver comparing each data of the first set with data of the EPG, as taught by Williams, thereby enhancing the user's enjoyment of the system.

Further, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Tsukidate to include moving the detected one of the first portions of the EPG stored in the RAM to the hard disk, as taught by Williams, to create more space in the cache memory to allow for newly updated information that is frequently accessed to be stored and copying old data for the purpose of permanently storing the data on a reliable medium as well as deleting the old data from cache so as not to unnecessarily waste system resources by storing data on two storage mediums.

As for Claim 50, Tsukidate and Williams disclose, in particular Williams teaches:

the set-top receiver receiving a second set of data, wherein each data of the second set identifies a respective program that can be presented on a television (monitor user habits and store top ten favorite programs in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver comparing each data of the second set with data of the EPG (program information) (Col. 8, lines 41-46);

storing a plurality of second portions of the EPG from the hard disk (620 – figure 6) to the RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver comparing each data of the second set with data of the EPG (Col. 7, line 37 to Col. 8, line 3).

As for Claim 51, Tsukidate and Williams disclose, in particular Williams teaches:

the set-top receiver receiving third set of data, wherein the set of data identifies a respective time slot (monitor user habits and store typical watching times in database 800) (Col. 6, line 63 to Col. 7, line 2);

the set-top receiver comparing each data of the third set with data of the EPG (program information) (Col. 8, lines 41-46);

storing a plurality of third portions of the EPG from the hard disk (620 – figure 6) to the RAM (604 – figure 6) of the set-top receiver in response to the set-top receiver comparing each data of the third set with data of the EPG (Col. 7, line 37 to Col. 8, line 3).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris Parry whose telephone number is (571) 272-8328. The examiner can normally be reached on Monday through Friday, 8:00 AM EST to 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chris Parry
Examiner
Art Unit 2623

/CP/

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